

a connector insert configured to be received within the connector receptacle to couple a plurality of insert contacts with the plurality of contacts of the connector receptacle, the connector insert comprising:

- a following surface configured to engage with the cam surface to bias the connector insert to a desired alignment with respect to the connector receptacle when the connector insert is inserted into the connector receptacle, and wherein at least a portion of the following surface is configured to be received within the follower receptacle when the connector insert is in a desired alignment with respect to the connector receptacle.

34. The implantable blood pump system of claim **33**, wherein the implantable blood pump system comprises a locking member extending at least partially around the connector receptacle.

35. The implantable blood pump system of claim **34**, wherein the locking member comprises a channel in which the connector receptacle is at least partially received.

36. The implantable blood pump system of claim **35**, wherein the locking member is rotatable about the connector receptacle.

37. The implantable blood pump system of claim **36**, wherein the locking member selectively engages with the following surface of the connector insert to retain the at least a portion of the following surface within the follower receptacle.

38. The implantable blood pump system of claim **37**, wherein the following surface comprises a key and a circular cylindrical member extending from a side of the connector insert.

39. The implantable blood pump system of claim **38**, wherein the locking member comprises: a blocking feature configured to engage with at least a portion of the following surface to prevent retraction of the connector insert from the connector receptacle; and a biasing feature configured to bias the blocking feature to engage with the at least a portion of the following surface.

40. The implantable blood pump system of claim **39**, wherein the blocking feature engages with the circular cylindrical member.

41. The implantable blood pump system of claim **40**, wherein the biasing feature comprises a compliant member configured to deflect to allow the blocking feature to engage and disengage with the at least a portion of the following surface.

42. The implantable blood pump system of claim **41**, wherein the inserting of the connector insert into the connector receptacle deflects the compliant member and rotates the locking member about the connector receptacle.

43. The implantable blood pump system of claim **42**, wherein the connector receptacle comprises limiting features that engage with abutting features of the locking member to limit rotation of the locking member about the connector receptacle.

44. The implantable blood pump system of claim **43**, wherein the locking member is coupled to the connector receptacle via a thrust washer.

45. The implantable blood pump system of claim **44**, wherein the controller is coupled to the blood pump via a two piece driveline, wherein the connector receptacle is located at an end of a first piece of the two piece driveline, wherein the connector insert is located at an end of a second piece of the two piece driveline, and wherein the coupling of the connector receptacle and the connector insert couples the controller to the blood pump.

46. The implantable blood pump system of claim **45**, wherein the connector insert comprises an exterior side, and wherein the following surface outwardly extends from the exterior side of the connector insert.

47. The implantable blood pump system of claim **46**, wherein the cam surface comprises a pair of inclined planes extending along at least a portion of an end of the connector receptacle.

48. The implantable blood pump system of claim **47**, wherein each of the pair of inclined planes terminates at one of the walls defining the follower receptacle.

49. The implantable blood pump system of claim **48**, wherein the pair of inclined planes comprises a first pair of inclined planes and a second pair of inclined planes.

50. The implantable blood pump system of claim **49**, wherein the first pair of inclined planes meet the second pair of inclined planes at a first point and a second point.

51. The implantable blood pump system of claim **50**, wherein the cam surface and the following surface are configured such that following surface is at least partially received in the follower receptacle before any of the plurality of insert contacts engage any of the plurality of contacts of the connector receptacle.

52.-57. (canceled)

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